



Human response and adaptation to drought in the arid zone: Lessons from southern Africa

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Year: 2009
Journal: South African Journal of Science. 105 (2-Jan): 34-39

Abstract:

Human adaptation and response to drought is primarily through evasion or endurance. A review of historical agricultural practices in southern Africa demonstrates evidence of drought evasion response strategies in well-established transhumance routes, where herders move livestock on a seasonal basis in order to exploit resources subject to different climatic regimes. European settlers to the arid regions of South Africa quickly recognised the necessity of these evasion options to survive drought, and adopted the transhumance practices of indigenous farmers. Areas of geographically diverse resource bases became hotly contested by settlers and indigenous farmers. The success of evasion systems are shown to hinge on good social and institutional support structures. When movement is not an option, drought endurance is pursued by attempting to limit the damage to the natural resource base. This is through a number of means such as forage conservation, varying livestock types and numbers, water and soil conservation and taking up alternative livelihood options. State responses to drought over the last century reflect the general South African pattern of racially divided and unjust policies relating to resource access. Historically the state provided considerable support to white commercial farmers. This support was frequently contradictory in its aims and generally was inadequate to enable farmers to cope with drought. Since the advent of democracy in 1994, the state has intervened less, with some support extended to previously disadvantaged and poor communal farmers. Climate change predictions suggest an increase in drought, suggesting that the adoption of mitigating strategies should be a matter of urgency. To do this South Africa needs to build social and institutional capacity, strive for better economic and environmental sustainability, embed drought-coping mechanisms into land restitution policy to ensure the success of this programme, and acknowledge the diversity of the agricultural sector.

Source: Ask your librarian to help locate this item.

Resource Description

Communication:

resource focus on research or methods on how to communicate or frame issues on climate change;
surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Communication Audience:

audience to whom the resource is directed

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Policymaker

Exposure :

weather or climate related pathway by which climate change affects health

Extreme Weather Event, Food/Water Security

Extreme Weather Event: Drought

Geographic Feature:

resource focuses on specific type of geography

Desert

Geographic Location:

resource focuses on specific location

Non-United States

Non-United States: Africa

African Region/Country: African Region

Other African Region: southern Africa

Health Impact:

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

Intervention:

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status, Workers

Resource Type:

format or standard characteristic of resource

Review

Resilience:

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capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content